

What Is Claimed Is:

1. A firearm comprising:
  - a housing having a handle;
  - a safety located in the housing to selectively prevent firing; and
  - a module removably attachable to the handle and containing an electronic identification device to identify an authorized user, the electronic identification device controlling the safety to prevent firing by unauthorized persons and to permit firing by the authorized user.
2. A firearm as defined in claim 1, further comprising a memory associated with the electronic identification device.
3. A firearm as defined in claim 1, wherein the electronic identification device is powered by current generated by movement of a first part of the firearm relative to a second part of the firearm.
4. A firearm as defined in claim 3, wherein the first part comprises a magnet carried by a magazine.
5. A firearm as defined in claim 4, wherein the magazine is stored in the handle.

6. A firearm as defined in claim 3, wherein the first part comprises a breech or a structure that is movable together with the breech.

7. A firearm as defined in claim 1, further comprising a piezoelectric element positioned in at least one of the housing and the module such that recoil stress caused by firing of a shot causes the piezoelectric element to generate current to power the electronic identification device.

8. A firearm as defined in claim 7 wherein the recoil stress is a result of movement of a recoil spring, a breech, or a powder-gas driven device.

9. A firearm as defined in claim 1, further comprising a magazine having an identification code which is read and recorded by the electronic identification device.

10. A firearm as defined in claim 1 wherein the electronic identification device evaluates the identification code associated with the magazine to identify the authorized user.

11. A firearm as defined in claim 1, further comprising a microphone coupled to the electronic identification device.

12. A firearm as defined in claim 11, wherein the electronic identification device comprises a voice recognition device or a word

recognition device.

13. A firearm as defined in claim 12, wherein the voice recognition device is structured to recognize a normal voice, a whisper and a hoarse voice of the authorized user.

14. A firearm as defined in claim 12, wherein the word recognition device is structured to recognize a word spoken in a normal voice, a whisper and a hoarse voice of the authorized user.

15. A firearm as defined in claim 12, wherein the microphone is connected with a memory which records data indicative of spoken commands from the authorized user.

16. A firearm as defined in claim 15, further comprising a timer or time signal receiver, and wherein the data indicative of the spoken commands comprises a firing time.

17. A firearm as defined in claim 11, wherein the microphone is connected with a memory which records data reflecting firing of shots.

18. A firearm as defined in claim 17, further comprising a timer or time signal receiver, and wherein the data reflecting firing of shots comprises

a firing time.

19. A firearm as defined in claim 17, wherein more than one user is an authorized user, and the data reflecting firing of shots comprises an identification of the shooter of the shots.

20. A firearm as defined in claim 2, wherein the memory stores an event indicative of a maintenance requirement of the firearm.

21. A firearm as defined in claim 1, wherein the electronic identification device comprises a sensor for iris recognition, the sensor being directed toward an expected location of an aiming eye of a user attempting to fire the firearm.

22. A firearm as defined in claim 1, wherein the safety prevents firing when the module is removed from the weapon.

23. A firearm as defined in claim 1, further comprising a blank module for installation in place of the module.

24. A firearm as defined in claim 23, wherein the blank module is incapable of releasing the safety.

25. A firearm as defined in claim 23, wherein the blank module releases the safety.

26. A firearm as defined in claim 1, further comprising a contact sensor which activates the safety if the weapon is dropped.

27. A firearm as defined in claim 2, wherein the firearm has a firearm identification number and the firearm identification number is written to the memory in the module to record the connection of the module to the firearm.

28. A firearm comprising:  
a housing;  
an electronic component located in the housing;  
an accumulator to temporarily store energy; and  
a generator at least partially contained within the housing to supply current to the accumulator in response to movement of at least one part of the firearm.

29. A firearm as defined in claim 28, wherein the at least one part of the firearm comprises a magnet carried by a magazine.

30. A firearm as defined in claim 29, wherein the generator comprises a coil positioned to generate current in response to movement of the

magnet of the magazine.

31. A firearm as defined in claim 29, wherein the magazine is stored in the handle.

32. A firearm as defined in claim 28, wherein the at least one part of the firearm comprises a breech or a structure that is movable with the breech.

33. A firearm as defined in claim 28, wherein the generator comprises a piezoelectric element positioned such that recoil stress caused by firing of a shot causes the piezoelectric element to generate current.